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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/700,656	02/14/2001	Harald Vater	JEK/VATER	7577

7590 10/17/2005  
Bacon & Thomas  
Fourth Floor  
625 Slaters Lane  
Alexandria, VA 22314-1176

EXAMINER

DAVIS, ZACHARY A

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/700,656	Applicant(s) VATER ET AL.	
	Examiner Zachary A. Davis	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-43 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. A Request for Continued Examination with amendment was received on 22 July 2005. Claims 1 and 22 have been amended. No claims have been added or canceled. Claims 1-43 are currently pending in the present application.

### ***Response to Arguments***

2. At least partially in light of Applicant's arguments, a requirement for restriction under 35 U.S.C. 121 and 372 has been deemed necessary. Specifically, in reference to independent Claims 1 and 22, *inter alia*, Applicant has argued that the cited references do not disclose the claimed limitations regarding modification of signals radiated by a processor during execution of a program by modifying the program steps. Further, in reference to independent Claim 26, *inter alia*, Applicant has argued that the cited references do not disclose the use of an XOR operation to mask keys, and again argues that there is no modification of a decryption algorithm to compensate for the masked keys. These arguments, combined with the analysis below, suggest that further prosecution of these differing groups of claims would be divergent, placing an undue burden on the Examiner. Therefore restriction is proper and is required as set forth below.

***Election/Restrictions***

3. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-25 and 41, drawn to a data carrier with a semiconductor chip and a method for executing security-relevant operations in such a data carrier (classified in class 713, subclass 194).

Group II, claims 26-33 and 42, drawn to a method for protecting secret data (classified in class 380, subclass 252).

Group III, claims 34-40 and 43, drawn to a method for executing a plurality of operations (classified in class 380, subclass 28).

4. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the method of Group II does not include the specific limitations of the methods and apparatus of Group I. Specifically, Group II does not include the steps of executing only selected operating program commands of such a kind or in such a way that data processed by the commands cannot be inferred from signals that have been detected outside the semiconductor chip. Therefore, the two groups of claims are not directed to a product and a process of use of said product. See 37 CFR 1.475.

5. The inventions listed as Groups I and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the method of Group III does not include the specific limitations of the methods and apparatus of Group I. Specifically, Group III does not include the steps of executing only selected operating program commands of such a kind or in such a way that data processed by the commands cannot be inferred from signals that have been detected outside the

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semiconductor chip. Therefore, the two groups of claims are not directed to a product and a process of use of said product. See 37 CFR 1.475.

6. The inventions listed as Groups II and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the method of Group II does not include the specific limitations of the method of Group III, and vice versa. Specifically, Group II does not include the steps required by Group III, such as varying the order of execution of a subset of operations, and Group III does not include the steps required by Group II, such as falsifying input data and combining output data with an auxiliary function value to compensate for the falsification of the input data. Therefore, the two groups of claims lack the same special technical feature. See 37 CFR 1.475.

7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-

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3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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EMMANUEL L. MOISE  
SUPERVISORY PATENT EXAMINER